

SPEECH

The role of supervisors and central banks in the climate crisis

Keynote speech by Frank Elderson, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, at the 31st Lisbon meeting between the central banks of Portuguese-speaking countries

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It is my great pleasure to be with you today on the occasion of the 31st Lisbon meeting between the central banks of Portuguese-speaking countries.

Today I would like to talk to you about the climate crisis and climate finance. Specifically, I would like to talk about the role that central banks and supervisors can and must play in leading by example and incorporating climate and environmental risks into our activities, both in a systematic manner and with a long-term perspective.

When preparing my remarks today, Fernando Pessoa's poem "Mar Português" was brought to my attention. It alludes to the Portuguese maritime odyssey, to how daring and how daunting it was to venture into unknown seas. I was thinking it offers an encouraging frame for the climate change venture in the way that it sets great undertakings against the courage required to face what seem to be unsurmountable challenges, and the great achievements that follow.

Developing knowledge and action plans around the climate crisis is, in many ways, as daring a task as the Portuguese maritime odyssey was. New paths to green the financial system need to be forged and decisive action needs to be taken before it's too late.

Introduction

This year has demonstrated, in a most striking way, that the consequences of the climate crisis are not just a long-term underlying threat but that they are materialising here and now, and with ever greater frequency. From disastrous floods and devastating fires in Europe, Africa and Asia, to extreme cold weather outbreaks in South America this summer, the cascade of dramatic weather events experienced all over the globe is causing widespread destruction and major damage to agriculture and food production. These extreme weather events offer painful reminders that we must act urgently, and jointly, to address the climate and environmental crisis that is upon us.

This need for urgent action is reiterated in the first part of the Sixth Assessment Report by the United Nations' Intergovernmental Panel on Climate Change published in August.^[1] This report highlights that many of the changes in the climate observed are unprecedented over hundreds of thousands of years and that some of the changes already set in motion are irreversible.

The intensification of the climate crisis has widespread economic consequences. Today, I would like to discuss the risks that this climate crisis poses for the financial sector. I will then describe what the ECB is doing to integrate climate and environmental considerations systematically and consistently into its activities. Thankfully, we are not alone in this effort. I will therefore go on to explain how members of the Central Banks and Supervisors Network for Greening the Financial System (also known as NGFS) are a strong catalyst for spurring our communities into action. Finally, I will offer some considerations as to how central banks and supervisors around the globe who have not yet done so, including in Portuguese-speaking countries, could benefit from joining the NGFS.

What's at stake?

Let me start with a statement I have been making for years and which fortunately is now widely accepted within the financial sector: climate change is a source of financial risk.

More specifically, climate change causes two main types of financial risk.

The first type are physical risks (acute and chronic), which we have all been hearing about with ever-increasing frequency. They include extreme weather events – such as heatwaves, landslides, floods, wildfires and storms – but also longer-term and more structural climate shifts – such as changes in average regional precipitation levels, extreme weather variability, ocean acidification and rising sea levels. These are the most salient risks; I think we all have vivid images of climate disasters in mind when we hear these words.

Yet climate scientists tell us that this is only the tip of the iceberg. Climate disasters will become more frequent, with most physical risk set to materialise after 2050 and potential tipping points being reached before then. What was exceptional 50 years ago will become the norm, and what we think of as normal today will become exceptionally rare if we fail to meet our collective objective of limiting global warming to 1.5°C. Besides the implications for human health and safety, economic activities and basic food security will also be challenged as more frequent heatwaves, cyclones, floods and droughts have an unprecedented impact on agriculture. And we are already facing the financial impact: the latest edition of the ECB's Financial Stability Review finds that around 80% of European banks are already exposed to climate-related physical risks^[2].

Transition risks are the second type of financial risk caused by the climate crisis. They include all costs associated with making the adjustment to a low-carbon or a net-zero economy. Reducing emissions is likely to have a significant impact on all sectors of the economy, particularly financial asset values.

According to the International Energy Agency report published in May 2021^[3], if we are to limit global warming to 1.5°C, no new oil and gas fields should be approved for development beyond projects that are already committed. In addition, part of the existing stock of coal plants may need to be closed by 2030 and the rest soon afterwards. By contrast, a rapid and vast ramping up of investments in renewable energy is needed.

I am aware of the importance of fossil fuels for some national economies. I am also acutely aware of the climate crisis some economies, sometimes the very same ones reliant on fossil fuels, are about to face. In both instances, we cannot be oblivious to the challenges ahead: we need to achieve the transition and manage its consequences now or face a climate crisis which will bring far worse economic and human consequences.

While governments are in the driving seat when it comes to climate policies, within our mandates we as central bankers and supervisors have a key role to play. Let me be clear: we are acting in the pursuit of, not in spite of, our mandates. This is our duty, not an option.

As the climate crisis renders weather events more frequent and disruptive, economic shocks are also likely to become more frequent. This, in turn, can expose the economy to greater volatility in output and prices. At the same time, as transition policies start to penalise carbon-intensive sectors and consumer preferences change, asset prices may fluctuate and large volumes of stranded assets may be generated, all of which will reverberate through the financial markets and the banking sector. And when the financial system is weakened, the transmission of monetary policy may be impaired.

Whatever combination of physical and transition risks materialises, the macroeconomic consequences and financial risks resulting from the climate and environmental crisis will be profound. These consequences lay squarely within the mandates of central banks and supervisors and require us to act now. Our failure to do so would mean we would not deliver on our mandates.

Steps taken by the ECB to address the climate and environmental crisis

The ECB has been systematically and consistently integrating climate and environmental considerations into its activities, including our monetary policy and banking supervision mandates, the

management of our non-monetary policy-related balance sheet and the conduct of all our operational tasks. Let me outline some of the main steps that we have taken or will take in the future.

In November of last year, ECB Banking Supervision published a guide on climate-related and environmental risks in which we asked banks to take a comprehensive, strategic and forward-looking approach to disclosing and managing all climate-related and environmental risks, including, for example, biodiversity loss and pollution risks. Banks conducted self-assessments on the basis of these expectations, and we benchmarked their preparations to address these risks. We have discussed our findings with them as part of our ongoing supervision and will soon publish a report with the results and good practices identified during this benchmarking exercise.

Next year, we will conduct a full supervisory review of banks' practices for incorporating climate risks into their risk frameworks, as we gradually roll out a dedicated Supervisory Review and Evaluation Process methodology that will eventually influence banks' Pillar 2 capital requirements.

In addition, ECB Banking Supervision will conduct a supervisory stress test with a focus on climate-related risks. This exercise will be based on a pioneering methodology for quantifying the impact of physical and transition risks on European banks over the next 30 years. We shared the methodology for this exercise with the banks under our supervision and published it yesterday on our website.

In particular, the exercise will assess how extreme weather events might affect banks in the next year, how vulnerable banks are to sharp increases in the price of carbon emissions, and how banks can respond to different transition scenarios over the next 30 years. Although at this stage we are only aiming to obtain a qualitative output to gain a broader picture of the initiatives currently being undertaken in the banking sector, this is an important learning exercise for the ECB and the banks involved, and we are confident that it will encourage banks to improve their climate and environmental risk measurement and management frameworks.

Intersecting the micro- and macroeconomic dimensions, this year the ECB also conducted an economy-wide stress test. The results of the analysis show that the short-term costs of a green transition pale in comparison to the costs of unfettered climate change in the medium to long-term.

Acknowledging the climate-related and environmental risks for our own balance sheet, in February 2021 the Eurosystem announced a common stance for applying climate change-related sustainable and responsible investment principles in non-monetary policy asset portfolios. We aim to start making annual climate-related disclosures for this type of portfolio within the next two years.

Finally, in July 2021 the Governing Council of the ECB concluded its monetary policy strategy review. The outcome of the review included an action plan to systematically reflect environmental sustainability considerations in the ECB's monetary policy. In addition to incorporating climate factors in its monetary policy assessments, the ECB will adapt the design of its monetary policy operational framework in relation to disclosures, risk assessment, corporate sector asset purchases and the collateral framework.

Fortunately, the ECB's commitment to further incorporating the climate and environmental crises into our tasks and responsibilities is shared by an increasing number of central banks and supervisors from across the world, who have joined forces in the NGFS. Importantly, they are also calling on the institutions they supervise to take action in this area.

The contribution of the NGFS

Let me step back for a moment to say a few words on the NGFS. The Central Banks and Supervisors Network for Greening the Financial System^[4], which I have the pleasure of chairing, was launched by its eight founding members at the One Planet Summit in Paris in December 2017. I would like to thank the Banque de France and its staff, who took the initiative to establish the Network, as well as the Banco de Portugal, the Banco Central do Brasil, the Central Bank of West African States and the many others who keep bringing climate change to the forefront and who help to broaden the Network's outreach.

When embarking on this venture, we knew that we would face immense challenges and that some would be too hard to tackle alone. Having others on board would make us stronger and more effective.

This has indeed been true: in less than four years the NGFS has grown to almost 100 members^[5], spanning five continents and many different types of economies and supervising all global systemically important banks and two-thirds of global systemically important insurers. Our 16 very engaged observers also provide their valuable opinions and input to help us achieve our goals.

We like to define ourselves as a coalition of the willing, a group of peers from across the globe who have decided to collaborate. We collaborate to better understand the impact of climate change and to better consider its implications in every area of our activity, from microprudential supervision to monetary policy, from managing our assets to preserving financial stability. We collaborate because the only competition we are involved in is a race to net zero, a race that we can only win by working together.

In our first comprehensive report^[6], which we published over two years ago, the NGFS called for collective action to address the financial risks stemming from climate change and we issued a set of recommendations to that effect. They reflect the best practices identified by NGFS members to facilitate the role of the financial sector in achieving the objectives of the Paris Agreement. Four of the recommendations were aimed at central banks and supervisors, with a view to helping them define the scope of their actions. We recommended (i) integrating climate-related risks into financial stability monitoring and micro-supervision; (ii) integrating sustainability factors into own-portfolio management; (iii) bridging the data gaps (since we need to work on data availability, transparency and comparability); and (iv) building awareness and capacity and encouraging technical assistance and knowledge sharing.

Over the past two years, the Network has published a number of reports on this set of recommendations, including various practical guides that provide central banks and supervisors with some practical tools to carry out activities related to climate and environmental risk^[7]. The Guide for supervisors^[8] and the Sustainable and responsible investment guide^[9] are just two examples.

NGFS members have also worked very hard to produce the NGFS climate scenarios^[10] for forward-looking climate risk assessments. These scenarios are a key tool that, by helping us gauge future, potentially catastrophic, risks, can drive decision-making now, long before the consequences of inaction become clear. In fact, the scenarios developed by the NGFS served as the basis for the ECB's economy-wide climate stress test this year. This was a top-down exercise based on information collected on millions of companies to which euro area banks are exposed via loans and securities holdings. Thanks to the Network's support in developing this exercise, the ECB was able to gather the most comprehensive set of backward and forward-looking climate and financial data available to a central bank.

The Network's publications cover all the core missions of our community of central banks and supervisors. They also reflect the considerable progress we have made in improving the analysis and management of climate-related and environmental risks.

Let me say one more thing about the NGFS. The Network is also a place for sharing knowledge and deepening our understanding of the economic and financial impact of the climate crisis. To further develop this endeavour, the NGFS recently announced the launch of the Climate Training Alliance (CTA)^[11], which was developed in close collaboration with the Bank for International Settlements, the International Association of Insurance Supervisors and the Sustainable Insurance Forum. The CTA will establish a dedicated online portal for global training on climate risks for central banks and supervisors, and will thus help to strengthen the resilience of the global financial system to climate risks.

The case for the central banks of Portuguese-speaking countries

I am pleased to see the tremendous impact that the NGFS has had in influencing the treatment of financial risks stemming from the climate crisis. NGFS members have been turning its recommendations into concrete action, especially over the past year. Climate action by central bankers and supervisors is becoming more comprehensive, more consistent and more structured, often thanks to a proper climate or sustainable finance strategy being designed.

Banco de Portugal and Banco Central do Brasil are good examples of institutions that have made great progress domestically in pressing ahead with the climate agenda. Let me share a recent example: a month ago, Banco Central do Brasil published a report that presents an integrated view of its initiatives on social, environmental and climate risks and opportunities. And in March 2020 Banco de Portugal published its Commitment to Sustainability and Sustainable Finance, which listed priorities for future activities. I would also like to thank them for their contributions to the NGFS, especially for the work they actively contribute to NGFS work streams.

At the same time, the knowledge-sharing dimension of the Network can help to drastically improve the capabilities of central banks and supervisors to manage climate risks, and it can also support and help guide an equitable transition to net-zero emissions. The CTA's online training platform will foster closer exchanges and further action by all members of the NGFS.

In my view, this joint platform can be of tremendous value in navigating the economic challenges of climate change, especially in those regions of the globe which will be most affected – extreme weather events are becoming increasingly frequent, threatening our agriculture, our food security, and ultimately the livelihoods of those around us.

Just as Portuguese-speaking countries are united by their language, NGFS members are united by our determination to ensure that climate-related and environmental risks are correctly managed by the financial sector. Whether a small island nation or a country with long coastlines exposed to rising sea levels, whether an oil, gas and natural resources exporter or an industrialised fossil-fuel dependent economy exposed to a rapid rise in carbon prices, we are all exposed one way or another. Action is needed now, and we – as central banks and supervisors – have a decisive role to play.

Conclusion

There is no doubt about it: the main risk is inaction. Analysis from the NGFS scenarios suggests that, if no further action is taken, 10% to 15% of global GDP would be at risk by the end of the century.^[12] And this is before accounting for the potential consequences of severe weather events. In other words, these figures should be understood as the minimum possible impact and with a devastating effect on many human lives. And it is a cost we will be paying every year. What's more, beyond climate change, biodiversity loss can also cause sudden shocks to the value of financial assets that will have a bearing on the balance sheets of financial institutions. The impact will vary across sectors and therefore also across countries.

The climate crisis is an international and intergenerational issue. It is without question the biggest challenge of our generation, which now has a unique responsibility: as has been said before, we are the first generation to see the impact of the climate crisis unfold before our eyes, and we are the last one to be able to address it. Some may think it is too late and, yes, the latest IPCC report makes for very uncomfortable reading. And that is an understatement. But climate scientists are also stressing that while it may soon be too late, it is not too late now. To make a difference, a global collective response is needed. Within our mandates, central banks and supervisors have a crucial role to play. We certainly cannot solve the climate crisis on our own, but within our mandates we can and must contribute. The NGFS was created to catalyse our response and to help us support each other in this vitally important task.

In this spirit, I would like to take this opportunity to invite those who have not yet joined the NGFS to get involved. I am convinced that the diversity of perspectives that exists within the Network contributes greatly to its success. The NGFS will certainly benefit from your involvement and your perspectives as much as you will benefit from the enthusiasm, knowledge and dedication of our members. The more of us that become involved, the stronger and more effective we will be.

In fighting the impact of climate change, just like venturing into unknown seas, Pessoa's inspiring words still resonate: "tudo vale a pena se a alma não é pequena"^[13].

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1. IPCC (2021), “[Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change](#)”.
 2. ECB (2021), [Financial Stability Review](#).
 3. International Energy Agency (2021), “[Net Zero by 2050. A Roadmap for the Global Energy Sector](#)”.
 4. [Central Banks and Supervisors Network for Greening the Financial System](#)
 5. [NGFS membership](#)
 6. NGFS (2019), “[A call for action: Climate change as a source of financial risk](#)”, April.
 7. See the [list of publications](#) on the NGFS website.
 8. NGFS (2020), “[Guide for Supervisors: Integrating climate-related and environmental risks into prudential supervision](#)”, May.
 9. NGFS (2019), “[A sustainable and responsible investment guide for central banks' portfolio management](#)”, October.
 10. See the [scenarios portal](#) on the NGFS website.
 11. See NGFS (2021), “[International financial organisations unite with the central bank and financial supervisory community to launch the Central Banks' and Supervisors' Climate Training Alliance \(CTA\) ahead of COP26](#)”, NGFS press release, September.
 12. NGFS (2021), “[NGFS publishes the second vintage of climate scenarios for forward looking climate risks assessment](#)”, NGFS press release, July.
 13. “Everything's worth doing if the soul of the doer isn't small.”, the Scottish Poetry Library translation

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